The Society of the
Plastics Industry, Inc.

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Contains No CBI

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TSCA Document Processing Center (TS-790)
Office of Toxic Substances
U. S. Environmental Protection Agency
401 M Street, S. W.
Washington, D. C. 20460

Re: Hercules, Inc. Letters of March 5, 1996 and March 26, 1996

Attention: Section 8(e) Coordinator

Mr. Gary L. McCallister, Hercules, Incorporated, copied The Society of the Plastics Industry on its March 26, 1996 letter, "Additional information to 8(e) submission dated March 5, 1996," distinguishing the product it tested from "polystyrene" as commonly understood in the plastics industry. This letter is to add additional information to clarify the distinction and to request that this information be filed with the subject letters.

Polystyrene is a glasslike solid below 100 deg C. Polystyrene as used commercially comes in three grades, easy flow, medium flow, and high heat. It is this range of polymer which is commonly understood to be "polystyrene." The typical properties of these grades of resin are listed below:

Property	High Heat	Medium Flow	Easy Flow
Molecular weight			
Mw	300,000	225,000	218,000
Mn	130,000	92,000	74,000
Softening temperature, deg C	108	102	88

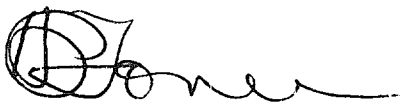
reference: "Encyclopedia of Polymer Science and Engineering," Vol 16, page 64.

The number of repeating styrene units in polystyrene is several orders of magnitude higher than the styrene oligomeric product which Hercules referenced in its March 5, 1996 and March 26, 1996 letters.

From the above, it is apparent that the substance for which Hercules, Inc. submitted the information differs significantly from polystyrene. The Hercules product is an ultra, ultra low molecular weight polymer which is a liquid or viscous solid at room temperature and is intended for use as a specialty material in very specialized applications. Polystyrene is a very high molecular weight polymer which is a glassy solid at room temperature and is used in a large variety of applications which depend on its properties of stability and toughness.

I trust this information further clarifies the distinction between styrene oligomeric materials and polystyrene as the term is used in the plastics industry.

Very truly yours,



cc: Gary L. McCallister, Hercules, Inc.